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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,613	01/28/2004	Niel Robertson	NEWM-001/01US 301711-2002	3415
22903	7590	02/05/2008	EXAMINER	
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Suite 1100			ART UNIT	
777 - 6th Street, NW			PAPER NUMBER	
WASHINGTON, DC 20001			2193	
MAIL DATE		DELIVERY MODE		
02/05/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<i>Office Action Summary</i>	Application No.	Applicant(s)	
	10/766,613	ROBERTSON ET AL.	
	Examiner	Art Unit	
	Tuan A. Vu	2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 19 December 2007.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-14 and 18 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-14 and 18 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/ are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date. ____ .
3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date . 5) Notice of Informal Patent Application
6) Other: ____ .

DETAILED ACTION

1. This action is responsive to the Applicant's response filed 12/20/07.

As indicated in Applicant's response, claims 1-2, 9, 18 have been amended, and claims 15-17, 19 canceled. Claims 1-14, 18 are pending in the office action.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-14, 18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Specifically, claim 1 recites (i) 'selecting test scripts' prior to (ii) 'storing data that associates the selected test scripts with ... corresponding auxiliary data', then (iii) 'receiving an indication that one ... auxiliary data items has been altered'. There is no specific teaching anywhere in the Specifications that shows a selecting of test scripts prior to the 'storing data'; nor is there an explicit description that actually corresponds to 'receiving an indication that ... data items has been altered after the 'storing data' step. The recited sequence (i) to (iii) does not map to any part in the Specifications. The Disclosure particularly discloses a dynamic generation of script with underlying capture of auxiliary data (Specs, pg. 12) into mapping files, comparing of mapping files with existing values from retrieved previously stored auxiliary information (Specs,

pg. 13); allowing users to create (Specs, pg. 14-15), add or remove script, via a tool in which users dynamically record scripts as in pg.12; correlating corresponding between a mapping file and previous auxiliary data (as pg. 13), so to be informed about changes within the latter, thereby able to identify a related and specific script for which such auxiliary data items no longer apply (Specs, pg. 14-15). Clearly, the selecting step (i) does not exist, i.e. prior to step (ii) of storing data (i.e. a mapping files creating), prior to a correlation process - which is interpreted as step of 'searching the stored data to identify' -- to identify auxiliary data changes, which is subsequent to step (iii). The 'receiving' step (iii) cannot then be viewed as disclosed **prior to** this 'searching the stored data' step, which is interpreted as the correlation process based on the mapping files. There is simply no 'receiving an indication' prior to a 'searching the stored data' step anywhere in the tool being described in pg. 12-15 of the Disclosure. The *selecting* step and the *receiving* (an indication) steps will be treated with little patentable weight, because the Inventor is not viewed as in possession these limitations at the time the original Invention has been reduced to practice.

Further, the 'without the application having to be executed' is found to have no enabling teaching throughout the Disclosure, particularly as end result of (emphasis added) the above recited steps (i) to (iii) leading to identifying a test script.

Claim 18 also recites 'select test scripts' 'store data that associates' and process an indication that one of the auxiliary ... has been altered'. In that sequence, claim 18 is also rejected for not having clear and full support from the Disclosure, in terms of 'select' --as in step (i)-- before a store data step, in terms of 'process an indication' -- as in step (iii) -- after the 'store data' step and prior to a 'search the stored data' step. The inventor is deemed not in possession

of the subject matter recited in terms of the above *select* and *process an indication* steps, as analyzed above based on the Disclosure.

Claims 2-14 are also rejected for not remedying to the lack of disclosure problem.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-14, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bischof et al., USPubN: 20040041827.

As per claim 1, (currently amended) A method for identifying required updates of testing scripts used to test an application, the method comprising:

selecting test scripts, wherein each test script corresponds to auxiliary data items associated with an application, the auxiliary data items including information about how the application works (e.g. Scripting Engine 250 – Fig. 2; para 0035-0038, pg. 4-5; Fig. 5 – Note: scripting engine per client to instantiate plurality of scripting processes reads on instantiating test script per one user);

storing data that associates the selected test scripts with their corresponding auxiliary data items (e.g. meta data 262 Fig. 2; Generate abstract representation 450 – Fig. 4; para 0037, pg. 5; *scripting* - para 0043-0044, para 0046, pg. 5-6; listing 3 -pg. 7-12; include information describing the session – para 0051, pg. 13; *information can include ... additional information related to parameters* – para 0052, pg. 13);

receiving an indication (Note: selecting test scripts and receiving an indication would be treated, respectively, as creating a scripting instance and obtaining indicating events from such instance – see USC 112 Rejection) that one of the auxiliary data items has been altered, the alteration of the one of the auxiliary data items indicating a particular manner in which the associated application has been altered (e.g. *displays changed state information ... set the Okcd element to the string value of* – para 0051, pg. 13 – Note: editor with special GUI pane reads on user receiving indication about altered GUI underlying attributes being part of the GUI panes); searching (e.g. GetChanged-State – para 0039, pg. 5) the stored data to identify the test scripts that correspond to the altered one of the auxiliary data items (e.g. each scripting process 325, 350 detect changes - para 0039-0040, pg. 5; *scripting engine 440*, para 0046, pg. 12); wherein the indication that one of the auxiliary data items has been altered is received (para 0051, pg. 13).

Bishof does not explicitly discloses reporting the identified scripts to a user, the test scripts that correspond to the altered one of the auxiliary data items are identified without the application having to be executed.

But the tool by Bishof enables any scripting instance to identify changes to its associated components, for such changes to be searched by some APIs invoked within the instance whereby obtaining direct report on the modified state of those elements (e.g. Get ChangedState - para 0039, p-0040, pg. 5). Bischof also proffers an environment for storing multiple test scripts or versions thereof (e.g. *structured database* – para 0060, pg. 14), with NW data portability and runtime applicability over heterogeneous platforms (see Fig. 1-2) or execution environments (para 0015, pg. 2; *abstract representation, second user environment, other formats* – para 0041, pg. 5) with emphasis about compacting of these multiple test records without having to replicate

effort as to regenerating test data and input parameters by minimizing undue change tracking (para 0048, bottom pg. 13; only the net changes to user interface session – para 0037, pg. 5). Bischof teaches a tool with capability as to enable multiple script instances in which the user is automatically reported of changes to the script's underlying associated (i.e. auxiliary) data (e.g. para 0032, pg. 4), report related to identifying an altered state of the scripts (e.g. by invoking of Get ChangedState call within one of said instance of scripting), without the user himself having to reexecute the entire application to identify the changes (see para 0037). In view of the above, it would have been obvious for one skill in the art at the time the invention was made to implement Bischof's tool so that any scripts can be identified among all the tool scripting processes applied by the user, whereby the user can be learned of the altered auxiliary element for each of said scripts as set forth above, i.e. such identification effected by the script instance underlying APIs. One would be motivated to do so because identification of such changes can support script versions to be synchronized and recorded as up to date versions in the above database, in order to support change/update maintenance with respect to script applicability among platforms, obviating the need to reexecute each script and recollect further auxiliary data using the tool (as set forth above).

As per claims 2-3, Bischof discloses recording (prior to selecting) a user's interaction with the application, thereby generating a test script (detect user actions 440 – Fig. 4; Fig. 5-6; *scripting engine 440*, para 0046, pg. 12); recording default values relied upon by the application during a user's interaction with the application, wherein the default values (e.g. *elementFormdefault = "qualified"....use= "required" default = "true"* – Listing 3, pg. 7) are

included with the test script (e.g. *A command interface ... assign ... default values ... test scripts* - para 0046, pg. 13).

As per claim 4, Bischof discloses recording auxiliary data (para 0046 – pg. 12-13) corresponding to a user's interaction with the application.

As per claim 5, Bischof discloses XML to represent auxiliary data in a network base paradigm involving front end, middleware and back end components (see para 0058-0059, pg. 14; Fig. 2; para 0030, pg. 3) wherein script-generating application is Browser/GUI-based and utilizes metadata stored in a database serving a support reusable knowledge for further application build (para 0027-0028, pg. 3; *previously generated abstract representation* - para 0038, pg. 5); i.e. database for storing reusable GUI objects for a multi-platform network-based replay tool (para 0015, pg. 2; Fig. 3), the GUI object abstracted into markup elements needed to support the different versions of script and creation thereof in multi-platforms (see *database, file system* - para 0059-0060, pg. 14), hence has disclosed file system or database query to retrieve the recorded auxiliary data (see XML format of pg. 6-10 in file system of para 0059-0060) for reuse in each script build.

As per claim 6, Bischof discloses recording the auxiliary data comprises querying a auxiliary data file (e.g. *file system* – para 0060, pg 14) that includes the auxiliary data.

As per claim 7, Bischof discloses calling an API that can return the auxiliary data (refer to the database query of claim 5, i.e. a query to a database or a file system reads on the presence of a API to effect such remote/interface call from where the replay tool application – see Fig 3 -- is located with respect to a database or file system layer – see *transmitted ... application program 300* - para 0036, pg. 4).

As per claim 8, Bischof discloses storing a database and querying of support GUI objects stored as XML representation as recorded the auxiliary data (re claim 5), Web-based network, use of middleware, using remote call to a service (see *middleware* -para 0058-0059, pg. 14; Fig. 2; para 0030, pg. 3; para; *requests ... server* – para 0032, pg. 4) to obtain remote data storage; hence has disclosed querying a Web service that can return the auxiliary data.

As per claim 9, Bischof discloses tagging user interface objects (pg. 7-10 – Note: Gui objects being defined and formatted in a XML reads on tagging GUI objects) that the user interacts with when operating the application (see Fig. 2-3) and mapping the tagged elements (e.g. validation of typed parameters – see para 0015, pg. 2; para 0038-0039, pg. 5; *Tag determining ... be considered on replaying* – Listing 3, top, pg. 7) with their corresponding auxiliary data items.

As per claims 10-11, Bischof discloses storing a record of each auxiliary data item and the test script with which it is associated (e.g. *previously generated abstract representation* - para 0038, pg. 5; XML format of pg. 6-10 in file system of para 0059-0060, pg. 14; version script – para 0026-0028, pg. 3); storing a record of each test script and the corresponding auxiliary data items (e.g. para 0059-0060, pg. 14; *stores ... scripts for later use* - para 0033, pg. 4).

As per claims 12-14, Bischof does not explicitly disclose prompting a user to generate a new test script to test the altered one of the auxiliary data items, to alter a test script to test the altered one of the auxiliary data items, and to remove a test script if the objects it tests have been deleted from the auxiliary data items. However, Bischof teaches a GUI tool enabling the user to identify changes to a collection of actions previously recorded (see para 0039, pg. 5) and

providing means for user to input commands or implementing alterations to the script (see para 0040-0041, pg. 5; Fig. 2), i.e. accommodating to state changes against the auxiliary data. Based on a GUI where user inputs dictate control to the changes (see para 0054 pg. 14; para 0014, pg. 2) made to the script based on state changes as above mentioned, it would have been obvious for one skill in the art at the time the invention was made to provide Bischof's replay tool with a visual prompt or a GUI pop-up (see Bischof: *If available ... displayed message* - pg. 11, bottom Listing 3) enabling the user to effect changes to the script according to changes detected to the auxiliary data, e.g. recreate a script via a session object, modify a script for retest, or to discard an non-reusable script, so that newest, fault-free reusable script can be kept on record so to provide proper support for subsequent reuse as contemplated by Bischof (para 0059-0060, pg. 14; *stores ... scripts for later use* - para 0033, pg. 4; *updated ... new test script* – para 0025-0026, pg. 3; para 0015, pg. 2)

As per claim 18, Bischof discloses system for identifying required updates of testing scripts used to test an application, the system comprising: a processor; a memory device; a plurality of instructions stored on the memory device, the plurality of instructions configured to cause the processor to:

select test scripts, wherein each test script corresponds to auxiliary data items associated with an application, the auxiliary data items including information about how the application works;

store data that associates the selected test scripts with their corresponding auxiliary data items;

process an indication that one of the auxiliary data items has been altered, the alteration of the one of the auxiliary data items indicating a particular manner in which the associated application has been altered (Note: select test scripts and process an indication would be treated as creating a scripting instance and obtaining indicating events from such instance – see USC 112 Rejection);

search the stored data to identify the test scripts that correspond to the altered one of the auxiliary data items; wherein the plurality of instructions are configured to cause the processor to receive the indication that one of the auxiliary data items has been altered; all of which having been respectively addressed in claim 1.

Bishof does not explicitly discloses reporting the identified scripts to a user, as in identifying the test scripts that correspond to the altered one of the auxiliary data items are identified without the application having to be executed. But this limitation has been rendered obvious by virtue of the rationale as set forth in claim 1.

Response to Arguments

6. Applicant's arguments filed 12/20/07 have been fully considered but they are mostly moot in view of the new grounds of rejection or not persuasive because they do not deemed no longer applicable with the previous Office Action. Following are additional Examiner's observation in regard thereto.

Applicant has submitted that Bischof requires that the application has to be executed for the data recording techniques to be applied (Appl. Rmrks pg. 8, middle para). The claim language about 'without the application having to be executed' entails the application for which the scripts are selected from the onset of the claim. There is no sufficient disclosure to support

an environment where many scripts are stored, retrieved and selected (emphasis added) in order for a selected script to undergo the sequences of *storing, receiving and searching, reporting* as claimed (refer to the USC § 112 Rejection). The concept for having an application run by a test script is totally absent from the above insufficient teaching, when the claim is viewed as a whole, absent support from the Specifications in terms of 'selecting test scripts'. And little weight is given to the 'without the application having to be executed'; that is, according to proper USC § 112 compliance, absence of a action (as in 'without ... having to be executed') cannot be given weight unless the claim or Disclosure provides a means that implements a particular mechanism that precludes an action from happening. The above argument about 'application' slated for an execution context is perceived as completely disjoint to the scenario (*storing, receiving and searching, reporting*) about searching of altered data, and when the above scenario is rejected for lack of enablement, the argument ultimately becomes non persuasive.

The claims will stand rejected as set forth in the Office Action.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A Vu whose telephone number is (571) 272-3735. The examiner can normally be reached on 8AM-4:30PM/Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571)272-3756.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-3735 (for non-official correspondence - please consult Examiner before

using) or 571-273-8300 (for official correspondence) or redirected to customer service at 571-272-3609.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tuan A Vu
Patent Examiner,
Art Unit 2193
February 04, 2008


02-04-08